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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,681	11/09/2001	Curt Schwaderer	5460240/21120	2381

7590 02/10/2005

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EXAMINER

TRAN, PHILIP B

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/045,681	SCHWADERER, CURT	
	<b>Examiner</b>	<b>Art Unit</b>	
	Philip B Tran	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 14-15 is/are rejected.
- 7) ☒ Claim(s) 4-13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>07/02 and 12/03</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

processor and at least one micro-engine, and said primary computing element is said core processor and said secondary computing element is said micro-engine and wherein said step of building said table is performed by said forwarding table manager on said core processor, and said step of searching said table is performed on said micro-engine by said forwarding table manager [see Figs. 2-5 and Paragraphs [0019-0023]].

***Allowable Subject Matter***

3. Claims 4-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Claim 16 is allowed.

***Other References Cited***

5. The following references cited by the examiner but not relied upon are considered pertinent to applicant's disclosure.

A) Varghese et al, U.S. Pat. No. 6,011,795.

B) Lunteren, U.S. Pat. No. 6,782,382.

C) Yazdani et al, U.S. Pat. No. 6,614,789.

D) Lipman et al, U.S. Pat. No. 6,192,051.

E) Crescenzi et al, U.S. Pat. No. 6,581,106.

F) Carcia-Luna-Aceves et al, U.S. Pat. Application No. US 2002/0129086.

**DETAILED ACTION**

***Claim Rejections - 35 U.S.C. § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3 and 14-15 are rejected under 35 U.S.C. § 102(e) as being anticipated by Choe, U.S. Pat. Application No.US 2002/0118682.

Regarding claim 1, Choe teaches a method of forwarding information packets operating on a multiple element computer system having primary and secondary computing elements, said method comprising providing a multiple element computing system having a primary computing element and a secondary computing element in operative communication with each other, building a table comprised of a plurality of entries with addresses associated therewith wherein said entries are organized hierarchically according to an LC-Trie compression algorithm operating on said addresses, receiving an information packet within said computer system wherein said information packet has a destination address associated therewith, searching said table using an LC-Trie search algorithm to find a match between said address of an entry in said table and said destination address of said information packet, transmitting said

information packet to a forwarding address associated with said address of said matching entry, and wherein said steps of said method are performed by a forwarding table manager application running on said primary and said secondary computing elements (= constructing routing/forwarding tables for an IP address lookup using LC-trie algorithm) [see Abstract and Figs. 2-5 & 13-15 and Paragraphs [0019-0023] and Paragraphs [0090-0092]].

Regarding claim 2, Choe further teaches the invention in accordance with claim 1 wherein said table comprises an LC-Trie search table and a next-hop table associated together, wherein said LC-Trie search table comprises information from said LC-Trie compression algorithm, and wherein said next hop table comprises information necessary to transmit said information packet to said forwarding address associated with said matching entry [see Figs. 13-15 and Paragraphs [0090-0091]].

Regarding claim 3, Choe further teaches the invention in accordance with claim 2 wherein said LC-Trie search table entries comprise a branching factor, a skip value, and an LC-Trie/Next-Hop Offset generated for each of said plurality of entries by said LC-Trie compression algorithm during said building step [see Paragraphs [0005] and [0072-0073]].

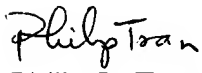
Regarding claims 14-15, Choe further teaches the invention in accordance with claim 1 wherein said computer system comprises a network processor with a core

6. A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS ACTION IS SET TO EXPIRE THREE MONTHS, OR THIRTY DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. FAILURE TO RESPOND WITHIN THE PERIOD FOR RESPONSE WILL CAUSE THE APPLICATION TO BECOME ABANDONED (35 U.S.C. § 133). EXTENSIONS OF TIME MAY BE OBTAINED UNDER THE PROVISIONS OF 37 CAR 1.136(A).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Tran whose telephone number is (571) 272-3991. The Group fax phone number is (703) 872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam, can be reached on (571) 272-3978.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

  
Philip B. Tran  
Art Unit 2155  
Feb 04, 2005